

REMARKS

Claim Rejections

Claims 1-8 and 10-13 are rejected under 35 U.S.C. §102(e) as being anticipated by Jung et al. (US 2004/0051836A1). Claim 9 is rejected under 35 U.S.C. §103(a) as being unpatentable over Jung et al. in view of Takahashi et al. (US 2003/0112382A1). Claims 14-16 are rejected under 35 U.S.C. §103(a) as being unpatentable over Jung et al. in view of Hinata (US 2001/0022644).

Drawings

It is noted that no Patent Drawing Review (Form PTO-948) was received with the outstanding Office Action. Thus, Applicant must assume that the drawings are acceptable as filed.

Claim Amendments

By this Amendment, Applicant has canceled claim 9 and has amended claims 1, 2, 7 and 14 of this application. It is believed that the amended claims specifically set forth each element of Applicant's invention in full compliance with 35 U.S.C. § 112, and define subject matter that is patentably distinguishable over the cited prior art, taken individually or in combination.

Claim 1 has been amended to incorporate the limitations of two additional elements: a **passivation layer (341)**, shown in FIG. 3C, and a **connecting structure (370)** having a **first plug (372)**, a **second plug (376)**, and an **interconnecting line (374)**, shown in FIG. 3D, to clearly recite the structure for connecting the gate line and the second conductive line. Support for this amendment is found in the Specification, paragraphs [0023] to [0024] and in FIGs. 3C and 3D.

Claim 2 has been amended to incorporate the limitation of "said gate line", which is described in amended Claim 1. Support for this amendment is found in the Specification, paragraphs [0023] and [0025] and FIGs. 3C and 4A.

Claim 7 has been amended to incorporate the limitations of the canceled Claim 9. Support for this amendment is found in the Specification, in paragraphs [0025] to [0026] and FIGs. 4A to 4D.

Claims 14 has been amended to incorporate the limitations of two additional elements: **a passivation layer (341)** as shown in FIG. 3C and **a connecting structure (370)** having a first plug (372), a second plug (376), and an interconnecting line (374) as shown in FIG. 3D, just like the amendment to the claim 1.

Applicant respectfully submits that the amended independent Claims 1 and 7 are patentably distinguishable over Jung et al. and requests that the Examiner withdraw the claim rejections under 35 U.S.C. §102(e) for the reasons discussed below.

Jung et al. teaches a plurality of first conductive lines formed on a frame area of a display panel for controlling a portion of TFTs, a dielectric layer formed on the frame area for covering the first conductive lines, and a plurality of second conductive lines formed on the dielectric layer for controlling the other TFTs. Moreover, Jung et al. teaches the second connecting lines (CL2) are formed from the same layer as the source electrode (125) and the drain electrode (126), each of the second connecting lines (CL2) is electrically connected to the corresponding scan line (similar to the gate line in the amended claim 1) through a second contact hole (127a) (see fig. 5 and paragraph [0061] of Jung et al.).

Regarding the amended claim 1, the structure for connecting the scan line and the second conductive line taught by Jung et al. (see fig. 5 of Jung et al.) is different from the connecting structure (370) taught by the present invention (see fig. 3D and paragraph [0024] in the present invention).

Jung et al. teaches that the second contact hole (127a) is formed on the insulating interlayer (127) and the gate insulation layer (122) (similar to the dielectric layer in the amended claim 1) by a photolithography method and an organic insulation layer (130) (similar to the passivation layer in the amended claim 1) formed by another photolithography method (see figs. 6D to 6G). Thus, as taught in Jung et al., there needs to be two photolithography methods to etch the dielectric layer and the passivation layer respectively.

Regarding the amended claim 7, the passivation layer (341) and the dielectric layer (326) is etched to form a plurality of openings (327) and (329) to expose the second conductive lines (328) and rest of the gate lines (340) by a single photolithography method to form the connecting structure (370) (see FIGs. 4A to 4D and 3D in the application). Hence, the fabrication method of the present invention saves a photomask when compared with the fabrication method described in Jung et al.

In accordance with the improvement shown in the amended claim 7 over Jung et al., the amended claim 1 with the connecting structure fabricated by using the fabrication method taught in the amended claim 7 also shows the improvement.

It is axiomatic in U.S. patent law that, in order for a reference to anticipate a claimed structure, it must clearly disclose each and every feature of the claimed structure. Applicant submits that it is abundantly clear, as discussed above, that Jung et al. do not disclose each and every feature of Applicant's amended claims and, therefore, could not possibly anticipate these claims under 35 U.S.C. § 102. Absent a specific showing of these features, Jung et al. cannot be said to anticipate any of Applicant's amended claims under 35 U.S.C. § 102.

The secondary reference to Takahashi et al. teaches a transparent electroconductive film (ECO) connecting merely to a drain line (DL) (see FIG. 6B in '382 reference). However, the connecting structure (370) disclosed in the claim 9 connects the second conductive line and the gate line, which are formed in two different and separated metal layers respectively.

In addition, Takahashi et al. only teach a method to prevent the disconnection of the drain line (DL) (see paragraph [0166]). The object of the method is different from that of the connecting structure disclosed in claim 9 of the present invention for transmitting control signal to the gate electrodes of TFTs.

Claim 14 has been amended to incorporate the limitations of two additional elements: a passivation layer (341) as shown in FIG. 3C and a connecting structure (370) having a first plug (372), a second plug (376), and an interconnecting line (374) as shown in FIG. 3D, just as the amendment to the claim 1.

The secondary reference to Hinata teaches a backlight module. Regarding the amended independent claim 14, the incorporated limitation of the connecting structure distinguishes the present invention from Hinata.

Even if the teachings of Jung et al., Takahashi et al., and Hinata were combined, as suggested by the Examiner, Applicant submits that there is not the slightest suggestion in either Jung et al., Takahashi et al., or Hinata that their respective teachings may be combined as suggested by the Examiner. Case law is clear that, absent any such teaching or suggestion in the prior art, such a combination cannot be made under 35 U.S.C. § 103.

Neither Jung et al., Takahashi et al., nor Hinata disclose, or suggest a modification of their specifically disclosed structures that would lead one having ordinary skill in the art to arrive at Applicant's claimed structure. Applicant hereby respectfully submits that no combination of the cited prior art renders obvious Applicant's amended claims.


Summary

In view of the foregoing amendments and remarks, Applicant submits that this application is now in condition for allowance and such action is respectfully requested. Should any points remain in issue, which the Examiner feels could best be resolved by either a personal or a telephone interview, it is urged that Applicant's local attorney be contacted at the exchange listed below.

Respectfully submitted,

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